THIRTEENTH

ANNUAL ADDRESS

TO THE

MECHANICS' INSTITUTE

BY

A. S. HALLIDIE, Esq.,

PRESIDENT,

Delivered at their Rooms March 4th, 1869.

SAN FRANCISCO:
SPAULDING & BARTO, BOOK, JOB AND CARD PRINTERS,
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ADDRESS.

To the Members of the Mechanics' Institute of the City of San Francisco:

GENTLEMEN—The expiration of the present term calls for the annual report of affairs connected with your Society from the President, and which I now beg to present you in accordance with the requirements of the By-Laws.

The Mechanics' Institute of the City of San Francisco, being the only representative of the industrial (other than the agricultural) interest of the State, naturally recognizes and includes within its scope all that which refers to the economic progress and conditions connected therewith. It is, therefore, with pleasure that we can cast a retrospect of affairs of the year just closed and find comparative results so satisfactory and successful.

In no part of the world have the mechanic arts found so new and so prolific a field—and never has a field, when properly cultivated, yielded so healthy and handsome a return.

But invention, claiming for its maternity necessity, here often discards its mother, and runs alone, untied by apron-strings or guided by experience. Intense independence of action results in oft traversing the same ground, and perhaps uncovering the tracks of others long concealed by the dust of time. Here is wasted thought, wasted energy, and barren disappointment—shoals and quicksands which your Society point out by its records of inventions and thoughts of others

in the various books on the shelves of its library. But this is relatively a progressive age ; and in the pressure of rapid ocean and river steaming, high-speed railroad locomotion, and incalculable telegraphic velocity, the mind finds it impossible to grope its way through the tortuous channel of old formula to grasp an idea and comprehend it.

Hence, your mission is to facilitate rapid tuition, and this can only be done by bringing to date the educational portion of your library. And this with the establishment of classes for technical education—an education necessary to a community so thoroughly identified with progress in the arts and sciences constitute, in my opinion, the leading object of the Mechanics' Institute.

The year past has been eminently one of progress. Railroads are being extended in every direction, opening up new sections and developing new industries, and under the strong inducements offered by Government, the Pacific Railroad has been pushed with wonderful energy and vigor, rapidity of construction being limited only by the supply of labor and means of transportation of material, and for months past the iron road has been built and completed at the rate of about two miles per day.

Telegraph lines have been extended to remote points, and by the inauguration of a new company considerable activity has been evinced in construction, while rates have been materially reduced. The subject of the North Pacific Telegraph line is being revived, and the importance of being brought into independent and immediate communication with Asia and Europe by this route cannot be overestimated. In ocean navigation, the successful consummation of the line of steamers to Japan and China has been the most noticeable feature of the year just closed.

In river navigation but little has been done. Many of the interior streams might be made available to settlers in the vicinity if efforts were directed to the removing of obstacles

in the shape of snags, etc., and straightening out some of the tortuous channels. Many of the rivers furnish ample and convenient water-power, and in some cases, as at Folsom, companies are organized who furnish to hand, by means of large canals, already constructed, an abundance of water in localities reached by railways, and adapted to wool culture, straw for paper manufacture, etc.

Of harbor improvements, the sea-wall now being constructed along the city front is about the only work in progress ; but the subject of a breakwater at Crescent City is being discussed by the Chamber of Commerce of this city, which, it is to be hoped, may lead to its construction—a good, safe anchorage in that vicinity being much needed.

Ship-building is increasing, and is now carried on to quite an extent in this port and along the coast. As yet, but little durable timber for ship-building has been found—fir, pine and laurel being principally employed.

In agriculture, steam cultivation has received some attention, and during the year past apparatus has been made here on a limited scale, with prospects of eventual success. The machines tried have been of California invention, but as yet have not given a result to justify general adoption. Steam cultivation is a matter of great importance to California, where wages are high ; and it is scarcely to be expected that we can export wheat in competition to cheap labor, when our fields require deeper plowing, unless we adopt some means of cultivating by the use of economical steam machinery. This is a matter which recommends itself to the engineer and economist in the prospects of our agricultural future.

Silk culture does not seem to have received any well-directed efforts. Spasmodic attempts have been made towards its manufacture, but here, again, the high price of labor puts in its veto, and, so far, no results have been obtained beyond the successfnl raising of healthy cocoons. If

families, instead of taking up large tracts of land for the cultivation of grain, could be induced to settle here with a view to the culture of silk, occupy sufficient land for what mulberry trees, etc., they would require, and bring the labor of the females and children into the raising of cocoons and reeling of the raw silk, it would at once open up a business in the exportation of the raw silk, and enable suitable patches of land to sustain a large number of families.

The climate of California being so admirably adapted to this industry, it would enable us to sustain a population which would not only starve itself, but the soil also—if engaged in the cultivation of grain.

Our local manufactories have been doing well, and several large works have been recently started. The earthquake of last October created a demand for iron for building purposes, and, although it caused a temporary stagnation in building, eventuated in requiring better material and better work.

The products of our mines fully equal last year. The amount of coal raised has increased some 25 per cent., while the quality is improving. We have exported $36,358,000 treasure and $1,330,000 quicksilver. Our farms have yielded bountifully, enabling us to transport grain during the year to the amount of 203,900 tons of wheat, 45,500 tons flour, in value $11,612,000 ; and we have exported of wool 6,612 tons, valued at $2,428,000.

During the past year 12,304 patents have been issued in the United States, of which 260 have been granted to the Pacific Coast, principally California, and this number speaks well for the inventive genius of this State. Many of these patent inventions are of considerable value, and have been recognized as such abroad.

Steps have been taken to organize a State University under a special State law, embracing a College of Mechanic Arts, aud intended more particularly for the purpose of giving a thorough technical education to the youths of this State.

One of the difficulties our young men labor under to-day is the lack of this education, leaving them fit only for the position of dry goods clerks, book-keepers, or car conductors. In our country, comparatively new, where so much depends on on individual effort, the mechanic arts should receive the most careful attention, being essential to the industrial condition and well being of a nation: the practice and theory being a prime necessity, raising the people above dependence on other nations, elevating the mind by oft repeating discoveries, and, as a result of our acquired knowledge of the laws of mechanism and matter, causing us to acknowledge in humility the unattainable superior laws of God.

Attention has been called to the advisability of organizing a Polytechnic Society in connection with the Mechanics' Institute, and a number of gentlemen have expressed a readiness to aid the project, and believe it would be a valuable accessory to your Society. A committee of five of your members have the matter in charge, and I doubt not will be able to report some plan for your endorsement at an early day.

Efforts have been made to organize evening classes for tuition. So far, but one drawing class has been established ; but it is hoped that with increased facilities greater success may be met with hereafter.

The Board of Directors, after due consideration, thought best not to propose a course of lectures before the Society, deeming the time unpropitious in view of the fact of lectures being delivered before other societies, and our lecture-hall being rented under terms they felt morally bound to respect.

Your Society has prospered under the steady determination of making it valuable and of benefit to the class it represents. That spasmodic efforts of enthusiasm do not inure so much to its permanent advancement as steady perseverance and patient, untiring energy, is proved by the small percentage of new members who remain in good standing

after election, while the practice of putting in members for electioneering purposes is both unprofitable and demoralizing. It is a fact that very many names on your books look for the payment of their dues annually by friends of candidates, and by these means contaminate old members who have been in the habit of paying their own dues.

There are 1,399 members in all; 993 of whom are stock members, who have received a receipt for the payment of the first or second installment of ten per cent., $5. Since the organization of the Society, April 10th, 1855, about 1,400 such receipts have been issued, of which about 650 are delinquent.

According to the Constitution and By-Laws of your Society, its capital stock is $75,000, in 3,000 shares of $25 each. There has never been a stock-book kept, and consequently we have no memoranda of transfers. If your Society was a corporation under the laws of the State, with power to issue stock, etc., there would be somewhere about 1,400 certificates of stock, representing your property, worth $140,000.

The attention and time of your officers has been fully occupied during the past year in carrying on the Sixth Industrial Fair; and which work was one of considerable magnitude, covering the whole details, from the borrowing of money to erect buildings, etc., to the final distribution of premiums, requiring the closest attention on the part of your officers, to the exclusion of a considerable portion of their own affairs. I cannot speak too highly of the disinterested and sacrificing spirit of your officers, knowing the value of their time, their only reward being in having done their duty faithfully. I beg to refer you to the report of your Board of Managers of the late Fair, for the proceedings in that connection.

During the past year extraordinary expenses have been incurred and met. Taxes for the widening of Kearny street, and the money borrowed last year, have been paid, and for the first time your property has been taxed under the law of

the last Legislature. Assessments for repairing street and crossing, overhauling of building, and various alterations suggested by necessity, have been made, all of which have compelled a large cash outlay. The average monthly receipts and expenses of your Society for the past year were as follows:

Receipts average per month—	
From Initiation Fees	$111 17
From Life Members	58 33
From Monthly dues	482 65
From Rents	578 75
From Catalogues	3 55
Total	$1,234 45
Expenditures average per month—	
Interest to Union Insurance Company	$500 00
Salaries	268 66
Gas	99 12
Water	12 00
Printing and Advertising	33 69
Books and Papers	104 51
Insurance	22 40
Taxes	70 00
Paving street	6 00
On Building	100 00
Total	$1,216 38
Leaving monthly balance	$18 07

It is evident that efforts must be made to increase our receipts and reduce our expenses. The items, $500 interest and $100 gas, form half of our entire expenses. It is hoped and expected that the coming Industrial Fair will result in reducing by one-half the amount of our mortgaged debt, and that the Gas Company will have more mercy on us in future. The other items cannot be reduced. Our expenditures for books should be largely increased, while that for insurance

will be greater, on account of advanced rates. On the other hand, the rapidly increased value of our property will probably improve our rents, and the average increase of members can be largely augmented by reducing the entrance fee now demanded; my idea being to demand no entrance fee from those who are merely reading members, and subject to the rules governing such members, and to exact an entrance fee, not to exceed $2.50, from those who take out books and are voting members, the privilege of voting to exist so long as dues are paid up; to abolish all stock, or semblance of stock, and to have the property and material of the Institute forever held in trust for the *purposes* of the Mechanics' Institute, and for no other.

We have endeavored to make your library essentially a Mechanics' Institute Library. I do not think we have yet succeeded; but this is our aim and object. We have a more valuable collection of mechanical and scientific works than any other in this city. But it is not as modern or as extensive as it should be, and I confess my disappointment at this time that it should be so. The popularity of your Library depends upon its completeness; yet I feel sure that with the same spirit of energy and perseverance which has characterized the management of your Society so many years past this will soon be accomplished. And while on this subject I would say, that many of the juvenile works have been found written in and defaced, and that one juvenile has been suspended for this misconduct.

The number of newspapers in the reading room has been materially increased during the past year, and we are now in receipt of almost every interior paper published in California; the papers received being as follows: Pacific Coast, 75; Eastern, 49; European, 28. Total, 152.

During the year there have been added to your Library 752 volumes, and your shelves now contain 12,000 volumes, as follows: Novels and tales, 3,090; theology, 363; travels,

507; philosophy and essay, 654; political economy, 321; biography, 1,060; history, 1,030; encyclopedias, etc., 294; reports, 2,375; science and art, 1,689; poetry and drama, 598; miscellaneous, 450. Total, 12,431.

The financial condition of the Institute stands, March 1, 1869, as follows:

ASSETS.

Lot 74.11½ frontage on Post street	$70,000 00
Building	45,000 00
Fixtures and furniture	6,000 00
Library	18,000 00
Cash in Librarian's hands	158 95
Cash in Treasurer's hands	1,077 89
Dues unpaid and collectable	618 00
Total assets	$140,854 84

LIABILITIES.

Union Insurance Co., Mortgages	$50,000 00	
Taxes	801 12	
William Patten, audited	550 00	
San Francisco Gas Co., audited	315 50	
Sundry bills, audited	69 44	
Bancroft & Co., not audited	382 05	
Salaries for February	300 00	
Sundry bills	62 80	
Total liabilities		52,480 91
Net assets		$83,373 93

In addition to the above, $6,000 may be safely added for the sale-value of property on Union Square over all encumbrances thereon.

This year it is proposed to have another Industrial Fair. Your Society has already held six, each of which has done so much towards the prosperity of the State; and now that we are about to be united with our Eastern brethren by the iron bands of the Pacific Railroad, let us invite them to come

and see for themselves what we are doing here on the western shore of North America, by concentrating the evidences of our industries in the Pavilion of our Seventh Industrial Fair, making it also an industrial celebration of the completed Pacific Railroad.

In conclusion, gentlemen of the Mechanics' Institute, I would express my heartfelt acknowledgements of the uniform courtesy and kindness extended to me by you under all circumstances; and to those who have worked with me in your service, I beg to convey my hearty appreciation of their kind advice and co-operation during the year gone by. And now that my term of office has expired, I join with you and them in the wish and hope that the Mechanics' Institute of San Francisco may continue to prosper, and be of service to the cause of Industry, Education, and Morality.

A. S. HALLIDIE, President.

March 4th, 1869.